

LISTING AND AMENDMENTS TO THE CLAIMS

This listing of claims will **replace** all prior versions, and listings, of claims in the application.

1. Floating microwave filter in a waveguide structure, comprising filtering elements sandwiched between two foam half-bars that are placed inside a waveguide, wherein the filtering elements are metal features etched in the surface of one of the two foam half-bars and the waveguide is an internally hollowed-out block of foam having a metallized outer surface.
2. Filter according to Claim 1, wherein the foam waveguide has a rectangular cross section and an internal cavity of circular cross section.
3. Filter according to Claim 1, wherein the foam waveguide has a circular cross section and an internal cavity of rectangular cross section.
4. Filter according to Claim 1, wherein the foam waveguide has a rectangular cross section and an internal cavity of rectangular cross section.
5. Filter according to Claim 1, wherein the surface of the foam bar on which the metal features are placed is crenellated.
6. Process for manufacturing a filter according to Claim 1, comprising a step of forming the metal features constituting the filtering elements by spraying a metal paint onto the surface of one of the foam half-bars.
7. Process for manufacturing a filter according to claim 1, comprising a step of forming the metal features constituting the filtering elements by brushing on a metal paint onto the surface of one of the foam half-bars.